

FORM PTO-1390 (REV. 07-2005)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	
<b>TRANSMITTAL LETTER TO THE UNITED STATES</b> <b>DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A</b> <b>SUBMISSION UNDER 35 U.S.C. 371</b>		EXPRESS MAIL NUMBER <b>EV 728 110 654 US</b>	ATTORNEY'S DOCKET NUMBER <b>036017/US/2 - 475396-00153</b>
		U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/553618</b>	
INTERNATIONAL APPLICATION NO. PCT/US2003/037114	INTERNATIONAL FILING DATE November 20, 2003	PRIORITY DATE CLAIMED November 20, 2002	
TITLE OF INVENTION <b>SYSTEM, PROCESS AND SOFTWARE ARRANGEMENT FOR DISEASE DETECTION USING GENOME WIDE HAPLOTYPE MAPS</b>			
APPLICANT(S) FOR DO/EO/US <b>BUD MISHRA and THOMAS ANANTHARAMAN</b>			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other			
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.			
2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.			
3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f). The submission must include items (5), (6), (9) and (21) indicated below.			
4. <input checked="" type="checkbox"/> The US has been elected (Article 31).			
5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))			
a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).			
b. <input type="checkbox"/> has been transmitted by the International Bureau.			
c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).			
6. <input type="checkbox"/> An English translation of the International Application as filed (35 U.S.C. 371(c)(2)).			
a. <input type="checkbox"/> is attached hereto.			
b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).			
7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))			
a. <input type="checkbox"/> are attached hereto (required only if not transmitted by the International Bureau).			
b. <input type="checkbox"/> had been communicated by the International Bureau.			
c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.			
d. <input checked="" type="checkbox"/> have not been made and will not be made.			
8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).			
9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).			
10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36			
<b>Items 11 to 20. below concern document(s) or information included:</b>			
11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.			
12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included			
13. <input checked="" type="checkbox"/> A preliminary amendment.			
14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.			
15. <input type="checkbox"/> A substitute specification.			
16. <input type="checkbox"/> A power of attorney and/or change of address letter.			
17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825			
18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4)			
19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).			
20. <input checked="" type="checkbox"/> Other items or information:			
PTO-1449 form with one reference, Petition to Revive Unintentionally Abandoned Application and Return Receipt Postcard			

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5) <div style="font-size: 2em; font-weight: bold; text-align: center;">10/553618</div> <div style="text-align: center;">To be assigned</div>		INTERNATIONAL APPLICATION NO. <div style="text-align: center;">PCT/US2003/037114</div>		ATTORNEY'S DOCKET NUMBER <div style="text-align: center;">036017/US/2 - 475396-00153</div>	
21. The following fees have been submitted: <input checked="" type="checkbox"/> a) Basic national fee (37 CFR 1.492(a))..... <b>\$300.00</b>				CALCULATIONS <b>\$ 300</b>	PTO USE ONLY
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)--4)..... <b>\$0.00</b> All other situations..... <b>\$200.00</b>				<b>\$ 200</b>	
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)--4) <b>\$0.00</b> Search fee (37 CFR 1.445(a)(2) has been paid on the international application to the USPTO as an International Searching Authority..... <b>\$100.00</b> International Search Report prepared and provided to the Office ..... <b>\$400.00</b> All other situations ..... <b>\$500.00</b>				<b>\$ 100</b>	
<b>TOTAL OF 21, 22 and 23 =</b>				<b>\$ 600</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is <b>\$250</b> for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100	/50 =		x <b>\$250.00</b>		
Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				<b>\$</b>	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	17 -20 =	0	x <b>\$50.00</b>	<b>\$</b>	
Independent claims	4 -3 =	1	x <b>\$200.00</b>	<b>\$200</b>	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ <b>\$360.00</b>	<b>\$</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$800</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				<b>\$400</b>	
<b>SUBTOTAL =</b>				<b>\$</b>	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				<b>\$</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$</b>	
Fee for recording the enclose assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property				<b>\$</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$400</b>	
				<b>Amount to be refunded:</b>	<b>\$</b>
				<b>charged:</b>	<b>\$</b>

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5) <div style="font-size: 1.5em; font-weight: bold; text-align: center;">10/553618</div> <div style="font-size: 0.8em; text-align: center;">To be assigned</div>	INTERNATIONAL APPLICATION NO. <div style="text-align: center;">PCT/US2003/037114</div>	ATTORNEY'S DOCKET NUMBER 036017/US/2 - 475396-00153
<p>a. <input checked="" type="checkbox"/> A check in the amount <u>\$400</u> to cover the above fees is enclosed. of _____</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. <u>50-2054</u> in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>50-2054</u> A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.</p> <p><b>NOTE: Where an appropriate time limit under 37 CFR 1.494 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</b></p>		
<p>SEND ALL CORRESPONDENCE TO: <span style="float: right;">CUSTOMER NUMBER <b>30873</b></span></p>		
<div style="display: flex; justify-content: space-between;"><div style="width: 35%;"><p>Dorsey &amp; Whitney LLP Intellectual Property Department 250 Park Avenue New York, New York 10177</p></div><div style="width: 60%; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px 0;"><div style="display: flex; justify-content: space-between;"><div style="width: 60%;"><p style="text-align: center;">Signature</p><p style="text-align: center;"><b>Gary Abelev, Esq.</b></p></div><div style="width: 35%; border: 1px solid black; padding: 5px;"><p style="text-align: center;">Date <b>October 17, 2005</b></p></div></div><div style="margin-top: 10px;"><p style="text-align: center;">Name</p><p style="text-align: center;"><b>40,479</b></p><p style="text-align: center;">Registration Number</p></div></div></div>		